

**ABSTRACT**

What disclosed is formation of a protective coating having oxidation resistance and abrasiveness at a portion to be processed of a component main body by employing an electrode composed of 5 a molded body molded from a mixed powder in which a powder of an oxidation-resistant metal and a powder of a ceramic is mixed or the molded body processed with a heat treatment, generating a pulsing electric discharge between the electrode and the portion to be processed of the component main body so that an electrode 10 material of the electrode and such carry out deposition, diffusion and/or welding on the portion to be processed of the component main body by energy of the electric discharge.